

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0066176; AI 19220; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** St. Landry Parish Solid Waste Commission  
St. Landry Parish Sanitary Landfill  
P.O. Box 610  
Washington, LA 70589
- II. **PREPARED BY:** Rachel Davis  
  
**DATE PREPARED:** November 18, 2009
- III. **PERMIT ACTION:** reissue LPDES permit LA0066176, AI 19220; PER20090001  
  
LPDES application received: April 21, 2009  
  
EPA has not retained enforcement authority.  
  
LPDES permit issued: October 1, 2004  
LPDES permit expired: August 31, 2009

### IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated leachate, treated contact stormwater, treated washwater, treated sanitary wastewater, and non-contact stormwater from a sanitary landfill serving St. Landry Parish.
- B. The facility is located on Landfill Road in Beggs, St. Landry Parish.
- C. The treatment facility consists of 3-cell oxidation pond. Truck wash water is treated by an oil/water separator before combining with sanitary wastewater and leachate for pretreatment by a package treatment plant before being routed to the 3-cell oxidation pond for additional treatment.
- D. Outfall 001  
  
Discharge Location: Latitude 30° 40' 50" North  
Longitude 92° 4' 27" West  
  
Description: treated leachate, treated contact stormwater, treated washwater, treated sanitary wastewater  
  
Expected Flow: 0.024 MGD  
  
Type of Flow Measurement which the facility is currently using:  
Estimation based on calculations

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Outfall 002

Discharge Location: Latitude 30° 41' 07" North  
Longitude 92° 4' 18" West

Description: Non-contact stormwater

Expected Flow: 0.088 MGD

Type of Flow Measurement which the facility is currently using:  
Estimation based on calculations

**V. RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into Bayou Boeuf in segment 060208 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10), for the purpose of limit calculations, is 0.1 cfs based on a report from Todd Franklin dated October 7, 2009.

The **hardness value** is 67.3 mg/l and the **fifteenth percentile value for TSS** is 11.25 mg/l based on a report from Todd Franklin dated October 7, 2009.

The designated uses and degree of support for Segment 060208 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060208 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060208 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 23, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:**

Subsegment 060208, Bayou Boeuf- Headwaters to Bayou Courtableau, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060208 was previously listed as impaired for organic enrichment/low DO, pathogen indicators, total dissolved solids, salinity, total suspended solids/turbidity/siltation, and nutrients for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 060208:

This facility will have an intermittent discharge. Therefore, it is not likely that this discharge will have any significant impact on the receiving stream that will cause further impairment. Suspected causes for impairment which were not delisted and are not directly attributed to similar point sources have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which were not delisted and could be attributed to pollutants, which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. This determination is made through best professional judgment. Suspected causes of

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concern remaining after this elimination process include dissolved oxygen, total suspended solids/turbidity/siltation, pathogen indicators, total dissolved solids, and nutrients.

Bayou Boeuf Fecal

Monitoring of fecal coliform colonies is the best indicator for the potential presence of pathogenic organisms in wastewater. The TMDL recommended seasonal limits of 200/100ml for May –October to protect for primary contact recreation. To protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits have been established in the proposed permit. These limits are based on the year round state criteria for primary contact recreation. They are more stringent than the TMDL and are set in accordance with best professional judgement based on similar effluents from similar facilities.

TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed

The TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments for the Bayou Teche Basin specifically addressed inorganic suspended solids (i.e. soil and sediment particles from erosion or sediment resuspension) rather than organic suspended solids. For each subsegment, turbidity and TSS were evaluated to determine if both were impairing the waterbody or if one was more of a concern over the other. The state has established guidelines for many streams for turbidity. However, there is no criterion for TSS. TSS and turbidity are highly correlated in that the constituents that influence turbidity are the same components that contribute to TSS. In this case, the cause of impairment for subsegment 060208 was determined to be TSS. A guideline of 64 mg/l was the target calculation for TSS in the TMDL study. (This is based on establishing a relationship between two measured parameters, one of which has a numeric standard. In this case the turbidity has a standard. Thus a relationship was demonstrated between TSS and turbidity.)

The TMDL's emphasis on inorganic suspended solids suggests runoff from landfills may be more of a concern than discharges from other point sources. The most significant source of TSS and sediment in this watershed is suspended solids in wet weather runoff. Landfills were not considered in the formulation of the TMDL and although the TMDL did not require a reduction in order to meet established targets in subsegment 060208, landfills by the nature of their operation are more likely to discharge high solids generated from runoff during wet weather events than other point sources. For this reason, TSS reporting is required at St. Landry Parish Landfill's stormwater outfall. The permittee should be aware of the potential for TSS limits based upon the TMDL in the future. TSS and turbidity concerns addressed in the TMDL will also be controlled in the proposed permit through Section C. Stormwater Provision. In addition, TSS is limited at the contact wastewater outfall based on the previous permits for St. Landry Parish Landfill and to protect the receiving waterbody from discharges of organic suspended solids.

Bayou Boeuf TMDL for Total Dissolved Solids (TDS)

The designated uses for Bayou Boeuf include the propagation of fish and wildlife. Total dissolved solids (TDS) serves as the indicator for the water quality criteria and for assessment of use support. Louisiana's water quality criterion for TDS in subsegment 060208 is 100mg/l. The TMDL establishes the need to include the TDS limits in the permit requirements based upon a wasteload allocation resulting from the TMDL. Only point sources discharging treated sanitary wastewater were considered in the TMDL. St. Landry Parish Landfill does discharge a small amount treated sanitary wastewater. However, the majority of its discharge is a result of landfill operation and is intermittent in frequency. For this reason, it is proposed St. Landry Parish Landfill monitor and report TDS. The permittee should be aware of the potential for TDS limits based upon the TMDL in the future.

Bayou Boeuf TMDL for Dissolved Oxygen and Nutrients including point source wasteload allocations and watershed nonpoint source load allocations

The current dissolved oxygen criteria for Subsegment 060208 is 5 mg/l year round. The TMDL recommends that permits for individual point sources in the watershed meet seasonal criteria of 3.5 mg/l June through July and 5.0 mg/l September –May. Because the discharge is not continuous, landfill point sources were not considered in the TMDL studies. It is proposed St. Landry Parish monitor and report

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dissolved oxygen for this permit cycle due to the intermittent nature of the discharge. LDEQ's position is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. *See In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits*. Docket No. AHD-DR-96001. LDEQ April 29, 1996. In addition, ammonia nitrogen effluent limitations and monitoring are required in the permit under EPA's Effluent Guidelines for the Landfill Point Source Category.

**OUTFALL 001**

Interim limits shall become effective on the effective date of the permit and expire two years after the effective date of the permit<sup>1</sup>

Final limits shall become effective two years after the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
BOD <sub>5</sub>	---	30 mg/l	45 mg/l	BPJ based on previous permit for facility and previously issued water discharge permits for similar facilities/effluents
TSS	---	50 mg/l	75 mg/l	BPJ from the previously issued LPDES water discharge permits for the facility
Dissolved Oxygen	---	Report mg/l	---	BPJ and Bayou Boeuf TMDLs for Dissolved Oxygen and Nutrients
TOC	---	---	50 mg/l	BPJ based on previous permit
TDS	---	---	Report mg/l	Bayou Boeuf TMDL for Total Dissolved Solids
Sulfates	---	---	250 mg/l	LAC 33:IX.1113.C.2 and BPJ from previously issued water discharge permits for similar facilities/effluents
Chlorides	---	---	250 mg/l	LAC 33:IX.1113.C.2 and BPJ from previously issued water discharge permits for similar facilities/effluents
Ammonia Nitrogen	---	4.9 mg/l	10 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
Alpha Terpineol	---	0.016 mg/l	0.033 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category
Benzoic Acid	---	0.071 mg/l	0.12 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category
p-Cresol	---	0.014 mg/l	0.025 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category
Zinc	---	0.11 mg/l	0.2 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category
Phenol	---	0.015 mg/l	0.026 mg/l	EPA's Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category

<sup>1</sup>Interim limits only apply to biomonitoring, all other limits will stay the same through out the life of the permit

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that

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the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C)

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**4) Priority Pollutants – General Comments**

The treatment facility will be treating leachate, contact stormwater, washwater, and sanitary wastewater. Studies have shown the leachate generated at municipal solid waste landfills can be highly concentrated and variable, and may include the presence of priority pollutants. Contributing to this variability may be the presence of household hazardous waste in the municipal solid waste stream (EPA, 1987). Pollutants which may be found in leachate include volatile organic compounds, metals and pesticides.

This Office has established a list of priority pollutants with threshold limits intended as action levels. Should a substance exceed the level of the established concentration, the Department is to be notified, in writing, within five (5) days of exceedance and St. Landry Parish Landfill shall institute a study to determine the source of the substance. Within sixty (60) days of the written notification the permittee shall submit a written account of the nature of the study, the study results, and measures being taken to secure abatement.

1. **Draft Threshold Limits** – The draft threshold limits are derived from either technology-based effluent limits or State Water Quality Standards and requirements. The most stringent of these limits is contained in the permit. Technology-based effluent limitations are based on the applicable effluent limitations guidelines, on Best Professional Judgement (BPJ) in the absence of applicable guidelines, or on a combination of these two methods. Currently, there are guidelines for the treatment of leachate from a municipal solid waste landfill and they have been included in the permit in addition to these threshold values. This office intends to employ technology-based effluent limitations taken from previously issued BPJ based water discharge permits for municipal solid waste landfills and other land disposal facilities. Each of the guideline regulations were accompanied by a development document, which provided the support for the final guideline. A water quality screen was performed using effluent characteristics since the landfill is the only source of flow to the unnamed tributary to Bayou Boeuf. This screen was used to establish water quality based limits.

**2. Derivation of Threshold Limits**

**LDEQ/EPA Technology-Based Limits** – In the early 1980's the LDEQ and EPA developed effluent limitations for all of the priority pollutants contained in the EPA 2C application for land disposal facilities. Although the limitations were technology-based and derived prior to formal State water quality criteria, water quality considerations played a significant role in the development of the limits.

**Priority Metals and Pesticides** – The threshold limits established for metals and pesticides are water quality based in accordance with the state water quality criteria (Appendix B-1). Metals for which state criteria have not been promulgated, threshold

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limits have been established using technology-based effluent limits taken from water discharge permits previously issued to municipal solid waste landfills and other land disposal facilities. In accordance with the water quality standards, there may be no discharge of PCBs.

Chemical	DEQ/EPA Daily Max. ug/l	WQBL Daily Max. ug/l	Threshold Value ug/l	MQL Required ug/l
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>				
Total Antimony	600		600	60
Total Arsenic	100	506	100	10
Total Beryllium	100		100	5
Total Cadmium	100	5	5	1
Chromium III	100	1075	100	
Chromium VI	100	15	15	10
Total Copper	500	35	35	10
Total Cyanide	100	9	9	20
Total Lead	150	14	14	5
Total Mercury	10	0.06	0.06	0.2
Total Nickel (freshwater)	500	449	449	40
Total Selenium	100		100	5
Total Silver	100		100	2
Total Thallium	100		100	10
Total Zinc	1000	280	280	20
Total Phenols	50	126	50	5
<b>VOLATILE COMPOUNDS</b>				
Acrolein	100		100	50
Acrylonitrile	100		100	50
Benzene	100	48	48	10
Bromodichloromethane	100	12	12	10
Bromoform	100	135	100	10
Carbon Tetrachloride	100	4	4	10
Chlorobenzene	100		100	50
Chloroethane	100		100	10
2-Chloroethyl vinyl ether	100		100	50
<b>VOLATILE COMPOUNDS (continued)</b>				
Chloroform	100	274	100	10
Dibromochloromethane	100	19	19	10
1,1-Dichloroethane	100		100	10
1,2-Dichloroethane	100	26	26	10
1,1-Dichloroethylene (1,1-Dichloroethene)	100	2.3	2.3	10
1,2-Dichloropropane	100		100	10
1,3-Dichloropropene (1,3-Dichloropropylene)	100	531	100	10
Ethylbenzene	100	2807	100	10
Methyl Bromide (Bromomethane)	100		100	50
Methyl Chloride (Chloromethane)	100	48257	100	50
Methylene Chloride	100	340	100	20
1,1,2,2-Tetra-chloroethane	100	7	7	10



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Tetrachloroethylene	100	9	9	10
1,2- <i>trans</i> -Dichloroethylene	100		100	10
Toluene	100	1114	100	
1,2- <i>trans</i> -Dichloroethylene (1,2-dichloroethene)	100		100	10
1,1,1-Trichloroethane	100	4632	100	10
1,1,2-Trichloroethane	100	27	27	10
Trichloroethylene (Trichloroethene)	100	82	82	10
Vinyl Chloride	100	140	100	10
<b>ACID COMPOUNDS</b>				
2-Chlorophenol ( <i>o</i> -Chlorophenol)	100	226	100	10
2,4-Dichlorophenol	100	177	100	10
2,4-Dimethylphenol	100		100	10
2,4-Dinitrophenol	100		100	50
4,6-Dinitro- <i>o</i> -Cresol {4,6-Dinitro- <i>o</i> -phenol} {4,6-Dinitro-2-methyl phenol}	100		100	50
2-Nitrophenol	100		100	20
4-Nitrophenol	100		100	50
P-Chloro-M-Cresol	100		100	
Pentachlorophenol	100		100	50
Phenol	100		100	10
2,4,6-Trichlorophenol	100		100	10
<b>PESTICIDES</b>				
Aldrin	10	0.001	0.001	0.05
Chlordane	10	0.0007	0.0007	0.2
DDD	10	0.001	0.001	0.1
DDE	10	0.0007	0.0007	0.1
<b>PESTICIDES (continued)</b>				
DDT	10	0.0007	0.0007	0.1
Dieldrin	10	0.0002	0.0002	0.1
Endosulfan	10	0.009*	0.009*	0.1
Endosulfan	10	0.009*	0.009*	0.1
Total Endosulfan		0.018	0.018	0.1
Endosulfan sulfate	10		10	0.1
Endrin	5	0.07	0.07	0.1
Endrin aldehyde	10		10	0.1
Heptachlor	10		10	0.05
Heptachlor Epoxide	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (Lindane)	10	0.36	0.36	0.05
Total PCB's	No discharge			1.0
Toxaphene	10	0.0004	0.0004	5.0
<b>BASE/NEUTRAL COMPOUNDS</b>				
Acenaphthene	100		100	10

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Acenaphthylene	100		100	10
Anthracene	100		100	10
Benzidene	100		100	50
Benzo(a)anthracene	100		100	10
3,4-Benzofluoranthene				
(Benzo(b)fluoranthene)	100		100	10
Benzo(k)fluoranthene	100		100	10
Benzo(a)pyrene	100		100	10
Benzo(ghi)perylene	100		100	10
Benzyl butyl Phthalate				
(Butyl benzyl Phthalate)	100		100	10
Bis(2-chloroethyl)ether	100		100	10
Bis(2-chloroethoxy) methane	100		100	10
Bis(2-ethylhexyl) Phthalate	100		100	10
Bis(2-chloroisopropyl) ether	100		100	10
4-Bromophenyl phenyl ether	100		100	10
2-Chloronaphthalene	100		100	10
4-Chlorophenyl phenyl ether	100		100	10
Chrysene	100		100	10
Dibenzo (a,h) anthracene	100		100	20
Di-n-Butyl Phthalate	100		100	10
1,2-Dichlorobenzene	100		100	10
1,3-Dichlorobenzene	100		100	10
1,4-Dichlorobenzene	100		100	10
(p-Dichlorobenzidine)				
3,3-Dichlorobenzidine	100		100	50
Diethyl Phthalate	100		100	10
Dimethyl Phthalate	100		100	10
2,6-Dinitrotoluene	100		100	10
2,4-Dinitrotoluene	100		100	10
Di-n-octyl Phthalate	100		100	10
1,2-Diphenylhydrazine	100		100	20
<b>BASE/NEUTRAL COMPOUNDS (continued)</b>				
Fluoranthene	100		100	10
Fluorene	100		100	10
Hexachlorobezene	100	0.0009	0.0009	10
Hexachlorobutadiene	100	0.43	0.43	10
Hexachlorocyclopentadiene	100		100	10
Hexachloroethane	100		100	20
Ideno (1,2,3-cd)pyrene	100		100	20
Isophorone	100		100	10
Naphthalene	100		100	10
Nitrobenzene	100		100	10
N-nitrosodimethylamine	100		100	50
N-nitrosodiphenylamine	100		100	20
N-nitrosodi-n-propylamine	100		100	20
Phenanthrene	100		100	10
Pyrene	100		100	10
1,2,4-Trichlorobenzene	100		100	10

\* Chronic Value taken from the Water Quality Criteria Summary

Total Chromium has been removed from State Water Quality Standards and replaced with criteria for Chromium III and Chromium VI, reference to Total Chromium has been removed from the PPS tables.

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A number of the threshold limitations established from the criteria are below EPA established minimum quantification levels (MQL). The MQL is accepted as the lowest concentration at which a substance can be quantitatively measured. Where the permit limits are below the MQL the following is noted in the permit:

If any individual analytical test result is less than the minimum quantification level (MQL) listed above, a value of zero (0) may be used as the test result for those parameters for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

## 5) Toxicity Characteristics

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. A WET limit is established in the proposed permit to meet narrative criteria which, in part, states that "No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life..." (LAC 33:IX.113.B.3). The permittee will have two years to comply with the WET limit.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0066176, Part II, Section D for the organisms indicated below.

### TOXICITY TESTS

### FREQUENCY

Chronic static renewal 7-day survival & reproduction test  
Using *Ceriodaphnia dubia* (Method 1002.0)

1/quarter

Chronic static renewal 7-day survival & growth test  
Using fathead minnow (*Pimephales promelas*) (Method 1000.0)

1/quarter

Dilution Series – The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in toxicity tests. These additional concentrations shall be 27%, 36%, 48%, 63%, and 85%. The low-flow effluent concentration (critical low-flow dilution or WET limit) is defined as 63% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Part II Section E & F** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Part II Section E & F** of the permit.

This facility has experienced several sub-lethal biomonitoring test failures during the previous permit cycle. A reasonable potential analysis also shows that reasonable potential for future lethal and/or sub-lethal toxicity exists for the St. Landry Parish Landfill. LDEQ does not recommend a Whole Effluent Toxicity (WET) Limit be implemented immediately upon permit reissuance. Rather, LDEQ recommends that a three year compliance schedule be incorporated into LA0066176. The purpose of this compliance schedule is to attain compliance with the WET limit.

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The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or waterbody. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

**OUTFALL 002**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

<b>Effluent Characteristic</b>	<b>Monthly Avg. (lbs./day)</b>	<b>Monthly Avg.</b>	<b>Daily Max.</b>	<b>Basis</b>
TOC	---	---	50 mg/l	Multisector General Permit-Sector L and previously issued water discharge permits for similar facilities/effluents
Oil & grease	---	---	15 mg/l	Multisector General Permit-Sector L and previously issued water discharge permits for similar facilities/effluents
TDS	---	---	Report	Bayou Boeuf TMDL for Total Dissolved Solids
TSS	---	---	Report	BPJ based on the Total Maximum Daily Load for TSS, Turbidity, and Siltation for the Bayou Teche Watershed
Total Recoverable Iron	---	---	Report	Multisector General Permit-Sector L and previously issued water discharge permits for similar facilities/effluents

**1) pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C)

**2) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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**X. PREVIOUS PERMITS:**

**LPDES Permit No. LA0066176:** Issued: October 1, 2004  
Expired: August 31, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	1/day	Estimate
BOD <sub>5</sub>	30 mg/l	45 mg/l	1/month	Grab
TSS	50 mg/l	75 mg/l	1/month	Grab
Ammonia-Nitrogen	4.9 mg/l	10 mg/l	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab
Chlorides	---	250 mg/l	1/month	Grab
Sulfates	---	250 mg/l	1/month	Grab
TDS	---	Report	1/month	Grab
Dissolved Oxygen	Report	N/A	1/month	Grab
pH	---	---	1/month	Grab
Priority Pollutant Scan	---	Report	1/year	24-Hr Comp
Alpha Terpineol	0.016 mg/l	0.033 mg/l	1/quarter	Grab
Benzoic Acid	0.071 mg/l	0.12 mg/l	1/quarter	Grab
p-Cresol	0.014 mg/l	0.025 mg/l	1/quarter	Grab
Zinc	0.11 mg/l	0.2 mg/l	1/quarter	Grab
Phenol	0.015 mg/l	0.026 mg/l	1/quarter	Grab
TOC	---	50 mg/l	1/month	Grab
Oil & Grease	---	15 mg/l	1/month	Grab
Total Recoverable Iron	---	Report	1/6 months	Grab
TSS	---	Report	1/month	Grab
TDS	---	Report	1/month	Grab

The permit contains biomonitoring.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **June 2007** and ending **June 2009** for this facility.

Date: June 11, 2009

Inspector: Rhonda McCormick

Findings and/or Violations:

1. Not all the DMRs for 2009 could be located at the facility.
2. The ponds were not discharging at the time of the inspection
3. Levees were well maintained
4. Facility has been sampling and reporting as required by permit.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no compliance orders have been issued against the facility in the past two years

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## C) DMR Review

A review of the discharge monitoring reports for the period beginning **June 2007** through **June 2009** has revealed no violations.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for sanitary landfill facilities

**SEWAGE SLUDGE**

Part II, Section D requires that any truck disposing of hauled sewage sludge into the landfill must be properly registered by the Louisiana Department of Environmental Quality (LDEQ) to haul sewage sludge. The receipt of hauled sewage sludge from an unauthorized/unregistered hauler shall constitute a violation of the permit.

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**Stormwater Pollution Prevention Plan**

If the permittee does not already have a Storm Water Pollution Prevention Plan (SWP3), then the permittee shall prepare, implement, and maintain a SWP3 within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination, shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Part II, Section B of the permit.

If the permittee does already have a Storm Water Pollution Prevention Plan, the Plan should be reviewed for compliance with Part II, Section B of the permit and updated if necessary.

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, St. Landry Parish Solid Waste Commission, St. Landry Parish Sanitary Landfill, April 21, 2009.